

PEER-EDITED NOTES

LOGGERHEAD SHRIKE (*LANIUS LUDOVICIANUS*) PREDATION OF A
HORNED LARK (*EREMOPHILA ALPESTRIS*)

HOWARD O. CLARK, JR.

*Colibri Ecological Consulting, LLC, 9493 North Fort Washington Road, Suite 108,
Fresno, California 93730; e-mail: hclark@colibri-ecology.com*

Abstract.—The Loggerhead Shrike (*Lanius ludovicianus*) is a medium-sized songbird known for its behavior of impaling prey items. Most prey species include invertebrates such as grasshoppers and beetles, but it also takes vertebrate species such as rodents, birds, and reptiles. Herein, I report the impalement of a Horned Lark (*Eremophila alpestris*) on a barbed wire fence in San Luis Obispo County, California, likely by a Loggerhead Shrike.

Key Words.—diet; foraging; grassland; Laniidae; predation; prey

The Loggerhead Shrike (*Lanius ludovicianus*) is a medium-sized, gray songbird that commonly inhabits open landscapes with scattered shrubs, interspersed with grasses and forbs in grasslands, scrublands, steppes, deserts, prairies, and savannas throughout most of North America including Mexico (Yosef 2020). The species is infamous for impaling prey on sharp objects, such as barbed wire, cacti, thorns, and even yucca (Reid and Fulbright 1981; Yosef 2020), but it may also store its kill between the forked branches of shrubs. Once an item is impaled, the shrike typically flies off, leaving the item behind, possibly using impalement as a food cache method (Yosef and Pinshow 2005). Common prey items include invertebrates, such as grasshoppers, crickets, and beetles, and vertebrates, such as rodents, birds, amphibians, and reptiles (Cicero 1993; Clark 2011; Yosef 2020).

Of particular interest is the predation of other passerines similar in size to the Loggerhead Shrike. Bird predation is not common for the Loggerhead Shrike, which is well documented in the literature. Many of the predated birds mentioned in the literature are similar in size to the shrike and may even be larger. Birds and other vertebrate prey are typically subdued and killed by Loggerhead Shrikes by breaking the neck at the base of the skull using their hooked beak (Yosef and Pinshow 2005). Predated birds by the Loggerhead Shrike include Mourning Doves (*Zenaida macroura*; Balda 1965), Grasshopper Sparrows (*Ammodramus savannarum*; Stewart 1990), Dark-eyed Juncos (*Junco hyemalis*; Smyth 1912); Savannah Sparrows (*Passerculus sandwichensis*; Johnson 1949), and Northern Cardinals (*Cardinalis cardinalis*; Ingold and Ingold 1987). Ingold and Ingold (1987) and Tyler (1991) present a summary of avian prey species of Loggerhead Shrikes. Although Horned Lark (*Eremophila alpestris*) predation by the Loggerhead Shrike has been reported in the literature (i.e., Conley 1982; Mays 1988), only one author mentions impalement (on two spiny branchlets of the box-thorn [*Lycium*] shrub;

Wiggins 1962). Horned Larks weigh 28–48 g (Beason 2020) and likely would not be a predation challenge for the Loggerhead Shrike (weight range of 45–60 g; Yosef 2020). Herein, I describe another probable case of the impalement of a Horned Lark by a Loggerhead Shrike in San Luis Obispo County, California.

On 26 January 2011, at approximately 1230, I was driving northbound on Bitterwater Road, San Luis Obispo County, California, when I noticed a large object hanging on a barbed wire fence (Fig. 1). I pulled over onto the shoulder and walked back to find the item. Upon further examination, I identified the object as a Horned Lark. It appeared to have a broken neck and was hanging on a single barb on the fence (Fig. 1). I have observed Loggerhead Shrikes in the vicinity during previous drives along Bitterwater Road and surmised that the impaled Horned Lark was the handiwork of the shrike. I took photographs, and then left the Horned Lark in place and departed the area. The surrounding land cover was rangeland vegetated with forbs and non-native grasses.

Acknowledgements.—Susan I. Hagen assisted with editorial revisions of the manuscript and literature search.

LITERATURE CITED

- Balda, R.P. 1964. Loggerhead Shrike kills Mourning Dove. *Condor* 67:359.
- Beason, R.C. 2020. Horned Lark (*Eremophila alpestris*), Version 1.0. In *Birds of the World*. Billerman, S.M. (Ed.). Cornell Lab of Ornithology, Ithaca, New York, USA. <https://doi.org/10.2173/bow.horlar.01>
- Cicero, C. 1993. Vulnerability of prey stimulates attacks by jays and shrikes on adult birds. *Western Birds* 24:101–102.
- Clark, H.O., Jr. 2011. Reptiles and amphibians as Loggerhead Shrike prey. *Sonoran Herpetologist* 24:20–22.



FIGURE 1. Horned Lark (*Eremophila alpestris*) impaled on a barbed wire fence likely by a Loggerhead Shrike (*Lanius ludovicianus*), along Bitterwater Road, San Luis Obispo County, California. (Photographed by Howard O. Clark, Jr.).

- Conley, M.R. 1982. Apparent predation on Horned Lark by Loggerhead Shrike. *Southwestern Naturalist* 27:367.
- Ingold, J.J., and D.A. Ingold. 1987. Loggerhead Shrike kills and transports a Northern Cardinal. *Journal of Field Ornithology* 58:66–68.
- Johnson, N.K. 1949. Loggerhead Shrike steals shot sparrow. *Condor* 51:233.
- Mays, L.P. 1988. Loggerhead Shrike preys on Horned Lark. *Bulletin of the Oklahoma Ornithological Society* 21:7.
- Reid, W.H., and H.J. Fulbright. 1981. Impaled prey of the Loggerhead Shrike in the Northern Chihuahuan Desert. *Southwestern Naturalist* 26:204–205.
- Smyth, E.A., Jr. 1912. Birds observed in Montgomery County, Virginia. *Auk* 29:508–530.
- Stewart, M.E. 1990. Impaled Grasshopper Sparrow in Jefferson County, Oklahoma. *Bulletin of the Oklahoma Ornithological Society* 232:16.
- Tyler, J.D. 1991. Vertebrate prey of the Loggerhead Shrike in Oklahoma. *Proceedings of the Oklahoma Academy of Science* 71:17–20.
- Wiggins, I.L. 1962. Horned Lark captured in flight by Loggerhead Shrike. *Condor* 64:78–79.
- Yosef, R. 2020. Loggerhead Shrike (*Lanius ludovicianus*), Version 1.0. In *Birds of the World*. Poole, A.F., and F.B. Gill (Eds.). Cornell Lab of Ornithology, Ithaca, New York, USA. <https://doi.org/10.2173/bow.logshr.01>
- Yosef, R., and B. Pinshow. 2005. Impaling in true shrikes (Laniidae): A behavioral and ontogenetic perspective. *Behavioural Processes* 69:363–367.



HOWARD O. CLARK, JR., is a Certified Wildlife Biologist with more than 25 y of professional wildlife and research experience. He earned his Master’s degree in Biology from California State University, Fresno, in 2001. His work as a researcher focused on the fauna and ecosystems of Northern, Central, and Southern California, and the Mojave Desert provinces and included extensive baseline mammalian inventories, surveys focused on rare animals, habitat assessment, radio telemetry, and long-term ecological studies on several endangered species. He regularly works with the Western Burrowing Owl (*Athene cunicularia*), San Joaquin Kit Fox (*Vulpes macrotis mutica*), Giant Kangaroo Rat (*Dipodomys ingens*), and the Mohave Ground Squirrel (*Xerospermophilus mohavensis*). He is currently a senior technical specialist with Colibri Ecological Consulting, LLC, Fresno, California. (Photographed by Erica Kelly).